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### NOTICE OF ALLOWANCE AND FEE(S) DUE

22852 7590 12/09/2010

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER

901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 EXAMINER BELYAEV, YANA

ART UNIT PAPER NUMBER

1741 DATE MAILED: 12/09/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522.557	08/18/2006	Marco Ruzzier	09877.0342	8847

TITLE OF INVENTION: APPARATUS AND METHOD FOR MEASURING THE WEIGHT OF AN OPTICAL FIBER PREFORM DURING A CHEMICAL DEPOSITION PROCESS FOR FORMING THE PREFORM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/09/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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WASHINGTON,	DC 20001-4413				- (,,	(Depositor's name)
						(Signature)
						(Date)
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nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/09/2011
EXAMI	NER	ART UNIT	CLASS-SUBCLASS	]		
BELYAEV	, YANA	1741	065-377000	-		
1. Change of correspondence address or indication of Tee Address* (7) CFR 1.363).  ☐ Change of correspondence address for Change of Correspondence Address form PT0/SB/122) attached.  ☐ Tee Address* indication for Tee Address* Indication form PT0/SB/122) attached.  ☐ Tee Address* indication for Tee Address* Indication form Number is required.  A SSIGNEE NOTE: Unless an assignment is identified below, no assignment of the Address* in Address* Address			registered attorney or 2 registered patent atto- listed, no name will be N THE PATENT (print or ty	vely, ie firm (having as a agent) and the name rineys or agents. If n printed.	member a 2s of up to o name is 3	document has been filed for
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	SMALL ENTITY state	as. See 37 CFR 1.27.			LENTITY status. Sec 37 (	
interest as shown by the re	ecords of the United Sta	ites Patent and Tradema	ark Office.	ис аррисані, a regis	urou attorney or agent; or	the assignee or other party in
Authorized Signature			Date			
Typed or printed name			Registration No			
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LLP			ART UNIT	PAPER NUMBER	
901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			1741		
			DATE MAILED: 12/09/2010		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 649 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 649 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/522,557 RUZZIER ET AL Notice of Allowability Examiner Art Unit YANA BELYAEV 1741 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. X This communication is responsive to the papers filed 7 October 2010 and the telephone interview of 3 December 2010. 2. The allowed claim(s) is/are 36-40 and 48-52, now renumbered 1-10, respectively. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. \_\_ 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8.  Examiner's Statement of Reasons for Allowance  Other
/Y. B./	/Matthew J. Daniels/
Examiner, Art Unit 1741	Supervisory Patent Examiner, Art Unit 1741

Attachment(s)

1. Notice of References Cited (PTO-892)

2. Notice of Draftperson's Patent Drawing Review (PTO-948)

3 Information Disclosure Statements (PTO/SR/08)

5. Notice of Informal Patent Application

Interview Summary (PTO-413),
 Paper No./Mail Date \_\_\_\_.

 Examiner's Amendment/Comment.

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## EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or
additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the
payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Neil Powell on 3 December 2010.

The application has been amended as follows:

In the Claims:

Claim 36, lines 1-2, "A method for measuring the weight of a preform for optical fibers during a chemical deposition process for the formation of a preform," has been replaced with --A method for forming an optical fiber.--

Claim 36, lines 6-7, "with the perform at least partially formed on the elongated element," has been deleted.

Claim 36, between lines 7 and 8, "depositing material on the elongated element to form the perform;" has been added.

Claim 36, line 10, "." has been replaced with --; --.

Claim 36, after line 10, "and forming an optical fiber from the perform." has been added.

Claims 42-47 have been cancelled.

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# Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: the primary reason for allowance is that although it is known to calculate the weight of a preform by elastically constrain an elongated element which comprises a chemical deposition substrate for the formation of the preform, inducing oscillation of the elongated element, detect the frequency of oscillation of the elongated element, and calculate the weight of the perform based on the detected frequency of oscillation, specifically in the art of Quartz Crystal Microbalances (QCM), it is not know to calculate the weight of the perform when material for the formation of the preform is deposited onto the elongated element or when applied to the field of optical fiber manufacturing. Furthermore, it is known to determine the fundamental oscillation frequency of an optical fiber being drawn in order to measure the tension of the optical fiber, but it is not known to calculate the weight of the perform based on the detected frequency of oscillation during the process of forming an optical fiber or inducing an oscillation or detecting the frequency of oscillation during chemical deposition.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Art Unit: 1741

US Patent 6,002,472 (Naka hereinafter) teaches a method of measuring the tension of an optical fiber being drawn by determining the fundamental oscillation frequency of the optical

fiber. However, Naka does not teach inducing an oscillation or detecting the frequency of

oscillation during chemical deposition or calculating the weight of the perform based on the

detected frequency of oscillation.

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to YANA BELYAEV whose telephone number is (571)270-7662.

The examiner can normally be reached on M-Th 8:30am - 6pm; F 8:30 am- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew Daniels can be reached on (571) 272-2450. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

 $system, \, contact \, the \, Electronic \, Business \, Center \, (EBC) \, at \, 866-217-9197 \, \, (toll-free). \, If \, you \, would \,$ 

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. B./ Examiner, Art Unit 1741 /Matthew J. Daniels/ Supervisory Patent Examiner, Art Unit 1741